Alaska Industrial, Institutional, Structural, and Health Related Pest Control Supplemental Information



Category Seven

In general, applicators who apply pesticides to property other than their own, or act as a pesticide consultant must obtain certification from the Alaska Department of Environmental Conservation (ADEC) Pesticide Program. Applicators who apply restricted-use pesticides must also be certified.

Applicators who use pesticides to control interior pests in buildings or structures, including homes, restaurants, homes, schools, hospitals, warehouses, storage units, or any other structures, must be certified by the Alaska Department of Environmental Conservation (ADEC) in Category Seven. Examples of applicators who should be certified in this category include those who work for a pest control company that sprays for spiders inside someone's home, a carpet cleaning company that uses anti-bacterial sanitizer, or a mold remediation company that uses anti-fungal products to control mold.

The Washington State University *Study Manual for Pest Management Professionals* contains the majority of information needed to successfully complete the written examination to obtain certification in Category Seven in Alaska. However, regulations and requirements are different in Alaska, as are some environmental conditions and some types of pests. This supplemental manual provides additional information that is specific to Alaska.

You will also need to have a working knowledge of the information covered in the following documents and manuals:

- National Pesticide Applicator Certification Core Manual; and
- State of Alaska Pesticide Regulations in Title 18, Chapter 90 of the Alaska Administrative Code (18 AAC 90).

CALCULATIONS

Precise and accurate application is important for every pesticide application. Strong math skills, including the ability to calculate speed, volume, odd shaped areas, mixing ratios, rates of application, etc. will be necessary to successfully pass examination for this category.

PUBLIC NOTIFICATION AND POSTING

A public place is defined as plazas, parks, public sports fields, government offices or grounds (except those with restricted access), and common areas of apartment buildings or multi-family dwellings.

Before applying pesticides to any public place, applicators must first post written notice informing the public when pesticides will be applied, and how long they must remain out of the area.

Signs must meet the following requirements:

- posted at each access point,
- posted prior to application of pesticide,

- remain in place at least 24 hours, or the re-entry period specified on the label, whichever is longer,
- at least 8 ½ by 11 inches in size,
- located between three feet and four feet above the ground, except if posted outdoors on a stake, at least 12 inches off the ground,
- include information about the date and time of application, contact name and phone number, and how long public must remain out of the area.

Record of the application, including all information required on the sign, must be maintained for at least two years after application.

Public notification requirements do not apply to the use of anti-microbial pesticides, rodenticides in tamper resistant bait stations, or ready to use pastes, foams, or gels.

Regulations related to public notification and posting requirements may be found at Title 18, Chapter 90, Section 630 of the Alaska Administrative Code. Please review the specific details of these requirements in the Pesticide Regulations.

PESTICIDE USE IN SCHOOLS

The state of Alaska has specific regulations regarding reducing use of pesticides in schools. There are additional requirements for posting treatment areas and notification of parents and guardians prior to pesticide use in schools. Applicators must be knowledgeable about these requirements, and should be able to provide necessary information to school administrators.

Regulations require that parents or guardians be notified at least 24-hours prior to pesticide use at a school. Specific information about the location, date and time, and pesticide to be used must be provided, as well as contact information for the school and the pesticide product.

Before applying pesticides on school grounds, applicators must first post written notice with information about the pesticide application. Signs must meet the following requirements:

- posted at each access point to the treatment area,
- posted prior to application of pesticide,
- remain in place at least 24 hours, or the re-entry period specified on the label, whichever is longer,
- at least 8 ½ by 11 inches in size,
- include the statement "Pesticide treated area, keep out until dry" (or other time required by the label),
- include information about the date and time of application, pesticide name and EPA registration number, and contact name and phone number.

School administrators must ensure that the sign remains posted and children are kept out of the treated area for at least 24 hours, or the re-entry interval if it is longer.

These requirements do not apply to antimicrobials (sanitizers), tamper proof rodent bait stations, use of rodenticides in areas that children cannot access, or use of gels, pastes, or foams in areas that children cannot access. The requirements also do not apply in a school that is unoccupied for at least 72 hours following the application.

Regulations related to pesticide use in schools may be found at Title 18, Chapter 90, Section 625 of the Alaska Administrative Code. Please review the specific details of these requirements in the Pesticide Regulations.

ALASKA RECORD KEEPING REQUIREMENTS

State regulations require certified applicators to keep detailed records of ALL commercial or contract pesticide applications. Records must be kept for a minimum of two years and must contain the following information for both restricted use pesticides (RUPs) and general use pesticides (GUPs):

- Name of applicator
- Date of application
- Pesticide product name
- EPA registration number
- Location/address of area treated
- Site (e.g. front yard, living room, etc.) or specific crop to which pesticide was applied
- Target pests
- Amount applied rate, dilution, and total amount. (*Pounds released for fumigants*)
- Fumigants only temperature and duration of exposure period

The following additional information must be recorded for all RUP applications:

- Name and address of customer where pesticide was applied
- Time of application
- Percentage of active ingredient
- Disposal information for excess container, pesticide, rinsate, including disposal method, date, location.

ALASKA PESTICIDE USE PERMIT REQUIREMENTS

By state law, an ADEC Pesticide Use Permit is required before you may apply pesticide under the following circumstances:

- To any state owned or leased right of way, regardless of the size of application area or the pesticide to be applied.
- To any state owned or leased land that is 1 acre or more in area.
- To any water body or wetlands, including creeks, drainages, streams, ponds, rivers and swamps, regardless of who owns the surrounding lands.

- To more than one property.
- Aerial application (by airplane or helicopter).

Regulations related to permit requirements may be found at 18 AAC 90, Sections 500-540. The permitting process is rigorous, and takes a minimum of 100 days to complete. Applicators should plan well in advance to ensure that a valid Pesticide Use Permit can be obtained for the planned pesticide application.

The permitting process requires detailed information about the specifics of the proposed pesticide use. Once all the required information is submitted, the application is opened to a public comment and review period, and may require a public hearing. Once the public review period is complete, ADEC will conduct a thorough review of the proposed project and determine whether or not to issue a Pesticide Use Permit. If a Permit is issued, it does not become valid until after a 40 day waiting period, to allow time for the public to appeal the decision.

Pesticide use often raises concern in local communities, and may become contentious. Public resistance to the proposed pesticide use may impact your ability to obtain a Pesticide Use Permit.

Failure to obtain a permit is a violation of state law, and can result in significant penalties under Alaska Statute 46.03.760. It is the responsibility of the pesticide applicator to ensure that all required permits and approvals are in place before applying pesticides.

COMMON STRUCTURAL PESTS IN ALASKA

Although there are fewer structural pests in Alaska than in many other areas, there are still a number of pests that require control at times. Common invertebrate pests in Alaska include carpenter ants, carpet beetles, grain beetles, flour beetles, Indian meal moths, cockroaches, fleas, and spiders. Alaska is also subject to rodent problems, including voles, house mice, and rats.

Most of these pests are covered in the Washington State University Manual. Applicators should be familiar with the identification, biology, and behavior of these pests. Additional information on Alaskan pests is provided below.

Bedbugs

Bedbugs are covered in the Washington State University Manual. However, due to their increasing presence across the nation, including Alaska, additional information is warranted.

Eradication of bedbugs can be extremely difficult – in general, chemical controls are only partially effective, and any insects that remain can re-populate an area. In addition, bedbugs can easily survive up to 18 months without food. The use of Integrated Pest Management (several different tactics and methods used together) will result in the most effective control of bedbugs.

Bedbugs tend to hide behind baseboards, moldings, window frames, door frames, behind pictures, within paneled walls, in electrical outlets, inside electronic equipment, and any other small crevice or gap. This makes it difficult to reach bedbugs with control efforts.

Clutter is probably the single biggest obstacle that stands in the way of control. Bed bugs hide and lay their eggs virtually everywhere. As a result, clutter provides an unlimited number of hiding places for bed bugs. In addition, clutter creates areas that cannot be effectively treated or reached by control efforts. The first step to controlling bedbugs is to eliminate as much clutter as possible and remove or expose as many hiding places as possible.

Vacuum cleaners with disposable bags can be used to physically remove many bed bugs from areas of high infestation such as mattresses or other furniture. Low vapor steam cleaners that reach at least 220 degrees Fahrenheit can also be used to kill bedbugs in these areas. It is very important to dispose of the contents of the vacuum immediately after use. Vacuum bags should be placed into plastic trash bags, sealed shut, and disposed of outside of the building.

Furniture or other infested items that are to be disposed of should be tightly sealed in plastic, clearly labeled as "Infested with bedbugs", and taken outside of the building. It is a good idea to destroy or disassemble these items to prevent 'dumpster divers' from taking these items home and starting a new infestation elsewhere.

Heat treatment is one method of controlling bedbugs. Temperatures over 120 degrees Fahrenheit are lethal to bedbugs and their eggs. Special portable heat units can be used to rapidly raise the temperature in a room to lethal levels. **The entire contents of the room must remain above this temperature for several hours.** This method is only effective if all gaps and exit routes are blocked to prevent bedbugs from avoiding temperature extremes or migrating into different rooms, and if all clutter is removed to prevent safe harborage for bedbugs. One advantage of heat treatment is that it has no chemical or toxic effects. This treatment may damage sensitive items such as photographs or electronics.

Most of the pesticides that are commercially available for bedbugs are effective as a contact spray, but have little or no residual effect. Chemicals like DDT and Malathion which were used in the past were very effective, largely due to their long-term residual properties. However, these products are no longer available due to serious environmental and human health effects from these chemicals.

The entire contents of a room must be exposed to any pesticide product used. Chemical controls are only effective if all gaps and exit routes are blocked to prevent bedbugs from avoiding the pesticide or migrating into different rooms, and if all clutter is removed to prevent safe harborage for bedbugs.

Available pesticides to control bedbugs changes frequently. It is important for applicators to research products and know their advantages and disadvantages, as well as do regular reviews of information about available products.

Foggers or 'bug bombs' do not effectively penetrate into the tiny cracks and crevices where bed bugs hide. As a result, they introduce potentially dangerous chemicals into a building without being effective. Use of room foggers to control bedbugs is not recommended.

Mold

Various types of mold, including black mold, may grow inside of structures in Alaska. Molds have the potential to cause health problems from allergies to toxic reactions.

All molds require moisture to grow. The key to mold control is to physically remove visible mold, and then to control the amount of moisture or humidity in the building. Chemical biocides are generally not effective against molds unless the moisture problem is also addressed. A good control program utilizes chemical controls in conjunction with moisture reduction and control.

Carpet Sanitizing

Carpet sanitizing is designed to reduce bacteria, fungus, and molds in carpeting. Only EPA registered products specifically labeled for this purpose should be used.

PORTIONS OF THE WASHINGTON STATE UNIVERISTY MANUAL TO DISREGARD

You may disregard the following sections or pages of the Washington State University manual, as they do not apply in Alaska:

- Chapter 4, Termites; pages 30-36. These pests do not occur in Alaska.
- Chapter 10, Medically Important Insects; pages 93-94, including information on mosquitoes and biting flies. In Alaska these pests are regulated under certification Category Ten.
- Chapter 11, Vertebrate Pests; pages 112-113, pages 115-118, and pages 124-125, including information on gophers, moles, skunks, and snakes. These pests do not occur in Alaska.
- Chapter 12, Inspections for Wood Destroying Organisms; pages 129-143, including information on how to conduct a structural inspection. Alaska does not require pesticide applicator certification for this activity.

Before Using Any Pesticide

STOP

All pesticides can be harmful to health and environment if misused.

Read the label carefully. Use only as directed.